

Observations of Amalthæa (113), made at Bilk, near Dusseldorf.
By Dr. R. Luther.

(Extract of a Letter from Dr. Luther to the Astronomer Royal).

I have the honour to send you some observations of my new planet (113), of the 10-11 magnitude, for which the Berlin astronomers have proposed the name *Amalthæa*.

1871.	M.T. at Bilk.	R.A.	N.P.D.	No. of Comps.
	h m s	h m s	° ' "	
March 12	10 59 24.9	12 1 11.34	82 14 24.6	8
13	9 21 4.5	12 0 24.48	82 6 47.5	6
15	9 8 43.3	11 58 41.65	81 50 53.6	8
19	9 5 33.6	11 55 12.12	81 19 49.7	10
20	9 6 35.4	11 54 19.64	81 12 19.0	10
22	9 20 3.7	11 52 33.90	80 57 35.1	11
23	8 58 11.1	11 51 42.48	80 50 38.2	10
24	9 55 40.0	11 50 48.63	80 43 29.1	10

Elements of Amalthæa.

The following elements have been computed by Dr. Tietjen, from observations made at Berlin on March 12, 18, and 25:—

1871, March 25^d.5. Berlin M.T.

M	342 55 31.7
$\pi - \Omega$	75 25 52.6
π	198 59 27.2
Ω	123 33 34.6
i	5 6 49.3
φ	4 38 28.3
μ	964".224
Log a	0.377219
Sidereal revolution	1344.1 days.

New Comet.

(Extract of a Letter from Dr. Winnecke to Mr. Hind, dated Carlsruhe, April 8.)

I discovered yesterday evening, at about 8½^h, a small telescopic comet in *Perseus*, the position of which with reference to a small

anonymous star of Argelander's *Durchmusterung* in its neighbourhood was estimated,

April 7	^h 8 ^m 40 M.T.	^h 2 ^m 27 ^s 0 R.A.	Decl. + 53° 55'
	Daily motion	+ 5 0	- 0 30

Observation of Winnecke's Comet at Mr. Bishop's Observatory, Twickenham.

	Twickenham M.T.	R.A.	Decl.
April 10	^h 8 ^m 35 ^s 9	^h 2 ^m 41 ^s 40.07	+ 52° 26' 49.9"

There was an evident extension of the nebulosity on the side opposite to the Sun, as if a tail might be expected on the comet's nearer approach. At present it will not be observed without a good telescope.

Elements of Winnecke's Comet. By Mr. Hind.

From the first observation of the new comet on the evening of discovery, and two by myself with Mr. Bishop's Equatoreal on the 10th and 12th, I have deduced the following elements of the orbit:—

T	1871, June 9.28137 G.M.T.
π	146° 19' 8" } Apparent Equinox,
δ	280 53 32 } April 10
i	86 50 54
log q	0.7854883
	Motion direct.

The comet appears to be quite distinct from any previously computed.